

April 17, 2002

Mr. Dean Daunhauer
Springs Valley Manufacturing
8831 West SR 56
W. Baden Springs, Indiana 47469

Re: **117-15306-00004**
First Significant Permit Modification to
Part 70 No: T 117-7357-00004

Dear Mr. Daunhauer:

Springs Valley Manufacturing was issued a Part 70 Operating Permit on February 2, 2001 for a stationary wood furniture products manufacturing operation. A letter requesting changes to this permit was received on January 25, 2002. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

On January 25, 2002, Springs Valley Manufacturing submitted an application to the OAQ requesting to install a new conveyORIZED downdraft booth, known as SB 40, equipped with baffles to replace a conventional spray booth, known as SB 21. The source has subsequently decided to keep the existing booth.

The changes in the Part 70 Operating Permit are documented in the Technical Support Document. All other conditions of the permit shall remain unchanged and in effect. For your convenience, the entire Title V Operating Permit, with all modifications and/or amendments made to it, is being provided.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Frank P. Castelli, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, at 631-691-3395 or in Indiana at 1-800-451-6027 (ext 631-691-3395).

Sincerely,

Original signed by Paul Dubenetzky

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
FPC/MES

cc: File - Orange County
U.S. EPA, Region V
Orange County Health Department
Southwest Regional Office
Air Compliance Section Inspector - Gene Kelso
Compliance Branch - Karen Nowak
Administrative and Development - Lisa Lawrence
Technical Support and Modeling - Michelle Boner

PART 70 OPERATING PERMIT OFFICE OF AIR MANAGEMENT

**Springs Valley Manufacturing
A Division of Kimball International, Inc.
8831 West State Road 56
West Baden Springs, Indiana 47469**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T117-7357-00004	
Issued by: Janet G. McCabe, Assistant Commissioner Office of Air Management	Issuance Date: February 2, 2001 Expiration Date: February 2, 2006

First Administrative Amendment AAT 117-14341-00004, issued June 19, 2001

First Significant Permit Modification No.: 117-15306-00004	Conditions Affected: A.2 and D.1.6 - D.1.15
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: April 17, 2002

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary wood furniture products manufacturing operation.

Responsible Official: Dean Daunhauer, Operations Manager
Source Address: 8831 West State Road 56, West Baden Springs, IN 47469
Mailing Address: 8831 West State Road 56, West Baden Springs, IN 47469
Telephone Number: 812-634-3702 (contact: Gayle Pahmeier)
SIC Code: 2511, 2521, 2434, 2517
County Location: Orange
County Status: Attainment for all criteria pollutants
Source Status: Part 70 Permit Program
Minor Source, under PSD Rules
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Wood coating spray booths and dip tanks, including:

- (a) Thirty-six (36) spray coating booths, identified as 1 through 32 and 34 through 37, using dry filters (booths 1 through 32 and 34 through 36) and baffles (booth 37) for particulate matter control;
- (b) One (1) coating dip tank, identified as station 33;
- (c) One (1) Automated Flat Line Finishing System, identified as SB-38;
- (d) One (1) conveyORIZED downdraft booth, known as SB 40, equipped with baffles for PM overspray control, exhausted through Stack SB 40, to be installed in 2002, capacity: 600 wood furniture parts per hour.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source also includes the following insignificant activities which are specifically regulated, as defined in 326 IAC 2-7-1(21):

- (a) Woodworking operations, including a scrap wood grinding process, with six (6) baghouses for particulate matter control, exhausting to stacks MBH-1, MBH-2, MBH-3, TBH-1, TBH-2, and PBHV-1. Sawdust from the baghouse silos is conveyed into closed semi-trailers. Wood chips from the grinder are transferred pneumatically and collected by cyclone. [326 IAC 2-7-1(21)(G)(xxix)] [326 IAC 6-3]

- (b) Other activities or categories not previously identified with potential, uncontrolled emissions equal to or less than thresholds require listing only. Pb 0.6 ton per year or 3.29 pounds per day, SO₂ 5 pounds per hour or 25 pounds per day. NO_x 5 pounds per hour or 25 pounds per day, CO 25 pounds per day, PM 5 pounds per hour or 25 pounds per day, VOC 3 pounds per hour or 15 pounds per day:
- (1) One (1) dip tank (DT-3) using water dye dip. [326 IAC 2-2]
 - (2) One (1) natural gas fired incinerator, with a design waste capacity of 300

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Wood coating spray booths and dip tanks, including:

- (a) Thirty-six (36) spray coating booths, identified as 1 through 32 and 34 through 37, using dry filters (booths 1 through 32 and 34 through 36) and baffles (booth 37) for particulate matter control;
- (b) One (1) coating dip tank, identified as station 33;
- (c) One (1) Automated Flat Line Finishing System, identified as SB-38;
- (d) One (1) conveyORIZED downdraft booth, known as SB 40, equipped with baffles for PM overspray control, exhausted through Stack SB 40, to be installed in 2002, capacity: 600 wood furniture parts per hour.

(Insignificant Activity): One (1) dip tank (DT-3) using water dye dip.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Permit Modification T117-12544-00004, issued August 31, 2000:

- (a) Volatile organic compound (VOC) emissions from all of the surface coating facilities shall be limited to less than 246 tons per twelve consecutive month period.
- (b) This emission limit and the associated record keeping requirements limit the potential to emit (PTE) of VOC for the source to less than 250 tons per year. Compliance with these conditions makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets by the Automated Flat Line Finishing System (SB-38) installed in 1998 and the side draft spray booth (3) installed in 2000, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, shall utilize one of the following application methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating
- Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured

dynamically at the center of the air cap and at the air horns of the spray system.

D.1.3 General Provisions Relating to HAPS [326 IAC 20-1-1] [40 CFR 63, Subpart A]

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63 Subpart JJ.

D.1.4 Wood Furniture Manufacturing Operations NESHAP [40 CFR 63, Subpart JJ] [326 IAC 20-14-1]

- (a) The wood furniture manufacturing operations are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart JJ, incorporated by reference as 326 IAC 20-14-1, with a compliance date of November 21, 1997. A copy of this rule is attached.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
- (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids, as applied; or
 - (B) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. All other thinners have a ten percent (10.0%) maximum VHAP content by weight; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use any combination of (A), (B), and (C).
 - (2) Limit VHAP emissions from contact adhesives as follows:
 - (A) Use compliant contact adhesives as follows:
 - (i) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids;
 - (ii) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids;or
 - (B) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
 - (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths (0.8) pounds VOC per pound solids, as applied.

D.1.5 Work Practice Standards [40 CFR 63.803]

The owner or operator of an affected source subject to this subpart shall maintain a written work practice implementation plan, as required by 40 CFR 63.803(a). The work practice

implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803:

- (a) Operator training course.
- (b) Leak inspection and maintenance plan.
- (c) Cleaning and washoff solvent accounting system.
- (d) Chemical composition of cleaning and washoff solvents.
- (e) Spray booth cleaning.
- (f) Storage requirements.
- (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
- (h) Line cleaning.
- (i) Gun cleaning.
- (j) Washoff operations.
- (k) Formulation assessment plan for finishing operations.

D.1.6 Volatile Organic Compounds (VOC)

Any change or modification which may increase the VOC emissions to ten (10) tons per year or more from the conveyORIZED downdraft booth, known as SB 40, must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.7 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from each of the coating spray booths, conveyORIZED downdraft booth, known as SB 40, and the Automated Flat Line System shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate from one hundred (100) pounds per hour up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.1.8 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control devices.

Compliance Determination Requirements

D.1.9 VOC Emission Determination [326 IAC 2-2] [40 CFR 52.21]

Pursuant to Permit Modification T117-12544-00004, issued August 31, 2000, to document compliance with Condition D.1.1, the Permittee shall maintain complete and sufficient records as follows:

- (a) The amount and VOC content of each coating material and solvent used.
- (b) The total VOC emissions for each month. VOC emissions for each month shall be determined through a mass balance calculation whereby VOC emissions equal the sum of VOC inventory at the beginning of the month plus any VOC received onsite during the month, minus the sum of VOC remaining in inventory at the end of the month and any unused VOC transferred offsite during the month. The VOC content of waste shipped offsite for disposal may also be deducted in calculating the total VOC emissions, if desired.

- (c) Compliance with Condition D.1.1 shall be demonstrated within thirty (30) days of the end of each month based on the total calculated VOC emissions for the most recent twelve (12) month period.

D.1.10 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63]

- (a) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (b) The Permittee is not required to test these facilities by this permit.

D.1.11 VOC and VHAP Limitations [326 IAC 8-1-2] [326 IAC 8-1-4] [40 CFR 63.804 and 63.805]

Compliance with the VOC and VHAP limitations contained in Conditions D.1.1 and D.1.4 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.12 Operator Training for PM Control

- (a) The Permittee shall implement an operator-training program:
- (1) All operators of spray coating booths shall be trained in the proper setup and operation of the particulate control system. All existing operators shall be trained within 60 days of the date of permit issuance. All new operators shall be trained upon hiring or transfer.
 - (2) Training shall include proper filter alignment, proper baffle placement and configuration, filter and baffle inspection and maintenance, and trouble shooting practices. The training program shall be written and retained on site. The training program shall include a description of the methods to be used at the completion of initial and refresher training to demonstrate and document successful completion. Copies of the training program, the list of trained operators and training records shall be maintained on site or available within a reasonable time for inspection by IDEM.
 - (3) All operators shall be given refresher training annually.
- (b) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

D.1.13 Particulate Matter (PM)

The dry filters and baffles for particulate matter (PM) overspray control shall be properly in place and maintained to ensure integrity of the filters and baffles, and particulate loading of the filters, at all times when the paint booths are in operation.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.14 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, D.1.6 and D.1.9, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be complete and sufficient to establish compliance with the VOC emission limit and VOC emission determination requirements established in Conditions D.1.1, D.1.6 and D.1.9.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include:

- (A) Purchase orders, invoices, and any other tracking records necessary to verify the amount of each product received onsite and any shipped offsite, and the amount of each product dispensed from inventory to the coating area and any returned to inventory from the coating area, and
 - (B) Material safety data sheets (MSDS) or other product information sheets necessary to verify the VOC content of each material used.
- (2) The amount of VOC drummed and shipped offsite each month for disposal as waste, if the waste VOC is deducted from the total reported VOC usage. Records shall include:
- (A) The amount and VOC content of each used coating material and solvent collected for disposal offsite. Records shall include Hazardous Waste Reclamation Record sheets, or equivalent, with an entry made each time additional material is placed in a waste collection drum. Each entry shall note the complete product name or product number of the material and the quantity of material placed in the drum.
 - (B) Material safety data sheets (MSDS) or other product information sheets necessary to verify the VOC content of each material placed in the drum.
- (3) The weight of VOCS emitted for each compliance period.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.4.
- (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.
 - (4) The VHAP content in weight percent of each thinner used.
 - (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (c) To document compliance with Condition D.1.5, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (d) To document compliance with Conditions D.1.12 and D.1.13, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.15 Reporting Requirements: PSD Minor Limit

- (a) A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) Records used to determine VOC emissions shall include the coating, thinner and clean up solvent usage, material safety data sheets (MSDS) and any additional information necessary to determine the VOC content, and the date of use. Records used to determine the VOC content of waste drummed and shipped offsite shall include the Hazardous Waste Reclamation Record sheets, or equivalent, with an entry for each addition to the waste collection drum, if the waste VOC is deducted from the reported VOC emissions.
- (c) A material safety data sheet (MSDS) and any additional information necessary to determine the VOC content for each coating and solvent shall be available for inspection at the facility, and the most accurate information available shall be used in determining VOC usage.

D.1.16 Reporting Requirements: NESHAP

- (a) A semi-annual Continuous Compliance Report to document compliance with Conditions D.1.4 and D.1.5 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported, on a calendar year basis with the reporting periods ending June 30 and December 31.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
 - (2) July 1 through December 31.
- (b) The report required in (a) of this condition shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for Part 70 Exempt Level Source and Significant Permit Modification

Source Background and Description

Source Name:	Springs Valley Manufacturing
Source Location:	8831 West SR 56, W. Baden Springs, Indiana 47469
County:	Orange
SIC Code:	2511, 2521, 2434, 2517
Operation Permit No.:	T 117-7357-00004
Operation Permit Issuance Date:	February 2, 2001
Significant Permit Modification No.:	117-15306-00004
Permit Reviewer:	Frank P. Castelli

The Office of Air Quality (OAQ) has reviewed a modification application from Springs Valley Manufacturing relating to the construction and operation of the following emission unit and pollution control devices:

One (1) conveyORIZED downdraft booth, known as SB 40, equipped with baffles for PM overspray control, exhausted through Stack SB 40, to be installed in 2002, capacity: 600 wood furniture parts per hour.

History

On January 25, 2002, Springs Valley Manufacturing submitted an application to the OAQ requesting to install a new conveyORIZED downdraft booth equipped with baffles to replace conventional spray booth, known as SB 21. The source has subsequently decided to keep the existing booth and add the new booth as SB 40. Springs Valley Manufacturing was issued a Part 70 Operating Permit on February 2, 2001.

The proposed booth is exempt from the source modification requirements pursuant to 326 IAC 2-7-10.5 because the potential to emit VOC from the booth is less than ten (10) tons per year.

The VOC emissions from this proposed booth will be incorporated into the existing surface coating VOC limit for this source. Therefore, the minor PSD status of the source pursuant to 326 IAC 2-2 will be maintained.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (EF)
SB 40	Conveyorized Downdraft Booth (SB 40)	3.0	2.00	6,500	68

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on January 25, 2002. Additional information was received on February 19, 2002.

Emission Calculations

See pages 1 - 2 of Appendix A of this document for detailed VOC and HAPS emission calculations which verify the exempt level status of the source modification.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U.S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.146
PM ₁₀	0.146
SO ₂	0.000
VOC	0.726
CO	0.000
NO _x	0.000

HAP	Potential To Emit (tons/year)
Methanol	0.001
TOTAL	0.001

The proposed booth is exempt from the source modification requirements pursuant to 326 IAC 2-7-10.5 because the potential to emit VOC from this booth is less than ten (10) tons per year and a single HAP is less than one (1) ton. Any change or modification which may increase the VOC emissions to ten (10) tons per year or more from the conveyORIZED downdraft booth, known as SB 40, must be approved by the Office of Air Quality (OAQ) before such change may occur.

Justification for Modification

The Part 70 Operating Permit is being modified through a Part 70 Significant Permit Modification.

The permit cannot be modified as a minor permit modification because of the applicability of the wood furniture NESHAP Subpart JJ to the proposed booth. The NESHAP is covered by Title I of the Clean Air Act (CAA) and pursuant to 326 IAC 2-7-12(b)(1)(E) any modification that is covered by Title I of the CAA cannot be processed as a minor permit modification. In addition, pursuant to 326 IAC 2-7-1(21)(K), the proposed booth cannot be considered an insignificant activity due to the applicability of the NESHAP Subpart JJ.

The proposed booth is exempt from the source modification requirements pursuant to 326 IAC 2-7-10.5 because the potential to emit VOC from the booth is less than ten (10) tons per year. Therefore a source modification is not required. An exemption letter will also not be issued because the proposed booth can be constructed at any time. However, the proposed booth can not operate until the Significant Permit Modification is issued.

The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (SPM 171-15515-00004) in accordance with 326 IAC 2-7-12(d)(1). The Significant Permit Modification will give the source approval to operate the proposed emission unit.

County Attainment Status

The source is located in Orange County.

Pollutant	Status
PM ₁₀	attainment
SO ₂	attainment
NO ₂	attainment
Ozone	attainment
CO	attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Orange County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Orange County has been classified as attainment or unclassifiable for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions

Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based upon 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/year)
PM	less than 250
PM ₁₀	less than 250
SO ₂	less than 250
VOC	less than 250
CO	less than 250
NO _x	less than 250

- (a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.
- (b) These emissions are from the Technical Support Document for the Part 70 Operating Permit, T 117-7357-00004, issued on February 2, 2001.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

Process/facility	Potential to Emit (tons/year)						
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPS
Proposed Modification	0.029	0.029	0.00	0.726	0.726	0.726	0.001
Entire Source After Modification	less than 250	less than 250	less than 250	less than 250	less than 250	less than 250	-
PSD Threshold Level	250	250	250	250	250	250	-

This modification to an existing minor stationary source is not major because the emission increases are less than the PSD threshold levels. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

Federal Rule Applicability

- (a) This modification does not involve a pollutant-specific emissions unit with the potential to emit after control in an amount equal to or greater than one hundred (100) tons per year. Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.
- (c) This source will continue to be subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart JJ, 40 CFR Part 63.800 because the potential HAPS are greater than the major source HAPS levels of ten (10) and twenty five (25) tons per year for single and combined HAPS, respectively. The requirements of Subpart JJ, as contained in the Part 70 Operating Permit, will apply to the proposed booth.

State Rule Applicability - Individual Facility

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) emissions from the proposed booth SB 40 shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\
P = \text{process weight rate in tons per hour}$$

The baffles for overspray control shall be in operation at all times the conveyORIZED downdraft booth (SB 40) is in operation, in order to comply with this limit.

326 IAC 8-2-12 (Surface coating emission limitations: wood furniture and cabinet coating)

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one (1) of the following application methods:

Airless Spray Application
Air Assisted Airless Spray Application
Electrostatic Spray Application
Electrostatic Bell or Disc Application
Heated Airless Spray Application
Roller Coating
Brush or Wipe Application
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

The proposed cup gun spray applicators comply with the requirements of 326 IAC 8-2-12 since they are considered air assisted airless spray applicators.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

There are no compliance monitoring requirements applicable to this proposed exempt level booth.

Proposed Changes

The permit language is changed to read as follows (deleted language appears as ~~strikeouts~~, new language appears in **bold**):

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)]
[326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

Wood coating spray booths and dip tanks, including:

- (a) Thirty-six (36) spray coating booths, identified as 1 through 32 and 34 through 37, using dry filters (booths 1 through 32 and 34 through 36) and baffles (booth 37) for particulate matter control;

- (b) One (1) coating dip tank, identified as station 33;
- (c) One (1) Automated Flat Line Finishing System, identified as SB-38;
- (d) **One (1) conveyORIZED downdraft booth, known as SB 40, equipped with baffles for PM overspray control, exhausted through Stack SB 40, to be installed in 2002, capacity: 600 wood furniture parts per hour.**

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Wood coating spray booths and dip tanks, including:

- (a4) Thirty-six (36) spray coating booths, identified as 1 through 32 and 34 through 37, using dry filters (booths 1 through 32 and 34 through 36) and baffles (booth 37) for particulate matter control;
- (b2) One (1) coating dip tank, identified as station 33;
- (c3) One (1) Automated Flat Line Finishing System, identified as SB-38;
- (d) **One (1) conveyORIZED downdraft booth, known as SB 40, equipped with baffles for PM overspray control, exhausted through Stack SB 40, to be installed in 2002, capacity: 600 wood furniture parts per hour.**

(Insignificant Activity): One (1) dip tank (DT-3) using water dye dip.

D.1.6 Volatile Organic Compounds (VOC)

Any change or modification which may increase the VOC emissions to ten (10) tons per year or more from the conveyORIZED downdraft booth, known as SB 40, must be approved by the Office of Air Quality (OAQ) before such change may occur.

D.1.67 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from each of the coating spray booths, **conveyORIZED downdraft booth, known as SB 40**, and the Automated Flat Line System shall not exceed the pound per hour emission rate established as E in the following formula:

Interpolation of the data for the process weight rate from one hundred (100) pounds per hour up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \text{ where } E = \text{rate of emission in pounds per hour; and} \\ P = \text{process weight rate in tons per hour.}$$

D.1.78 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

D.1.89 VOC Emission Determination [326 IAC 2-2] [40 CFR 52.21]

D.1.910 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11] [40 CFR 63]

~~D.1.110~~ VOC and VHAP Limitations [326 IAC 8-1-2] [326 IAC 8-1-4] [40 CFR 63.804 and 63.805]

~~D.1.124~~ Operator Training for PM Control

~~D.1.132~~ Particulate Matter (PM)

~~D.1.143~~ Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1, **D.1.6** and Condition D.1.~~98~~, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) shall be complete and sufficient to establish compliance with the VOC emission limit and VOC emission determination requirements established in Conditions D.1.1, **D.1.6** and D.1.~~98~~.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include:
 - (A) Purchase orders, invoices, and any other tracking records necessary to verify the amount of each product received onsite and any shipped offsite, and the amount of each product dispensed from inventory to the coating area and any returned to inventory from the coating area, and
 - (B) Material safety data sheets (MSDS) or other product information sheets necessary to verify the VOC content of each material used.
 - (2) The amount of VOC drummed and shipped offsite each month for disposal as waste, if the waste VOC is deducted from the total reported VOC usage. Records shall include:
 - (A) The amount and VOC content of each used coating material and solvent collected for disposal offsite. Records shall include Hazardous Waste Reclamation Record sheets, or equivalent, with an entry made each time additional material is placed in a waste collection drum. Each entry shall note the complete product name or product number of the material and the quantity of material placed in the drum.
 - (B) Material safety data sheets (MSDS) or other product information sheets necessary to verify the VOC content of each material placed in the drum.
 - (3) The weight of VOCS emitted for each compliance period.
- (b) To document compliance with Condition D.1.4, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Condition D.1.4.
- (1) Certified Product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
 - (2) The VHAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
 - (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable spray booth coating used.

- (4) The VHAP content in weight percent of each thinner used.
- (5) When the averaging compliance method is used, copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.
- (c) To document compliance with Condition D.1.5, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.
- (d) To document compliance with Conditions D.1.124 and D.1.132, the Permittee shall maintain a copy of the operator-training program, training records, and those additional inspections prescribed by the Preventive Maintenance Plan.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.154 Reporting Requirements: PSD Minor Limit

D.1.165 Reporting Requirements: NESHAP

Conclusion

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 117-15306-00004.

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations**

**Company Name: Springs Valley Manufacturing
Address City IN Zip: 8831 West SR 56, West Braden Springs, Indiana 47469
Exempt Level Source Modification: 117-15515
Plt ID: 117-00004
Reviewer: Frank P.Castelli
Date: January 25, 2002**

Material	Density (lbs/gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (units/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC (pounds per hour)	Potential VOC (pounds per day)	Potential VOC (tons per year)	Particulate Potential (tons/yr)	lbs VOC/gal solids	Transfer Efficiency
SB 40																
L127109 Color	6.91	97.40%	32.69%	64.71%	32.7%	2.60%	0.01250	1.000	6.64	4.47	0.06	1.34	0.245	0.01	171.98	40%
Thinner 91101	6.85	100.00%	34.0%	66.0%	34.0%	0.00%	0.01250	1.000	6.85	4.52	0.06	1.36	0.248	0.00	n/a	40%
UV Solution 870-1380	8.54	50.00%	0.0%	50.0%	0.0%	50.00%	0.01250	1.000	4.27	4.27	0.05	1.28	0.234	0.14	8.54	40%
Note: Acetone is also used for cleanup																

PM Control Efficiency 80.00%

State Potential Emissions

Add worst case coating to all solvents

Uncontrolled
Controlled

0.166 **3.98** **0.726** **0.146**
0.166 **3.98** **0.726** **0.029**

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lbs/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lbs/gal) * Weight % Organics)
 Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lbs/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1- Weight % Volatiles) * (1-Transfer efficiency) * (8760 hrs/yr) * (1 ton/2000 lbs)
 Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)
 Total = Worst Coating + Sum of all solvents used

